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FEAR OF CRIMINAL VICTIMIZATION IN RELATION TO SPECIFIC
LOCATIONS ON A COLLEGE CAMPUS

By

Nancy M. Steinmetz
B.S., University of Louisville, 2009

A Thesis
Submitted to the Faculty of the
College of Arts and Sciences of the University of Louisville
In Partial Fulfillment of the Requirements
For the Degree of

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Department of Sociology
University of Louisville
Louisville, Kentucky

May 2012

FEAR OF CRIMINAL VICTIMIZATION IN RELATION TO SPECIFIC LOCATIONS
ON A COLLEGE CAMPUS

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B.S., University of Louisville, 2009

A Thesis Approved on

April 20, 2012

by the following Thesis Committee

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Thesis Director

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DEDICATION

This thesis is dedicated to my family

Mr. Thomas J. Steinmetz

Ms. Amy Michele Steinmetz

Mr. Douglas McDaniel Steinmetz

and

Mr. Troy Bennett Steinmetz

who have always supported and encouraged me to be fearless in my endeavors

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ABSTRACT

FEAR OF CRIMINAL VICTIMIZATION IN RELATION TO SPECIFIC LOCATIONS ON A COLLEGE CAMPUS

Nancy M. Steinmetz

April 20, 2012

Feelings of fear on a college campus are driven by physical characteristics of a specific location as well as the demographics and past experiences of those visiting these locations. Factors such as gender, residency, race, age, class status, and other demographics, play a key role in a person's perception of their safety in a given space. Humans intuitively assess the spaces for prospect, refuge, and escape and intuition further add to the level of fear they may experience. Using a sample of students from a public university, this study examined how these factors worked together to form students' overall perceptions.

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CHAPTER I

INTRODUCTION

Researchers over the past four decades have conducted hundreds of studies in an attempt to define fear of crime and how factors such as gender, age, race, geographical location, and other types of elements, impact an individual's fear of crime. Many of those studies have focused on a specific population, college students, and a specific geographic location, the college campus (Baum and Klaus, 2005; Bledsoe and Sar, 2001; Fisher, 1995; Fisher, Cullen and Turner, 2000; Fisher, Sloan, Cullen & Lu, 1998, Fisher and May, 2009). Students, parents, and school administrators all have high expectations regarding the time that students will spend on campus. Students look forward to the variety of experiences that college life has to offer, such as new roommates, dorm life, entry into Greek or professional organizations, social life (parties & athletic events), and classes and class schedules that generally differ from their high school curriculum. Parents deliver their children into the hands of the administrators, hoping that these next years will not only be filled with a high degree of educational attainment and experiences, but that their sons and daughters will be safe in the new environment a college/university has to offer.

Unfortunately, over the past few decades, the picture of the peaceful campus setting has been shattered by the public becoming increasingly aware of a variety of criminal acts, such as rapes, date rapes, murders, assaults, mass campus shootings, hazing

incidents resulting from band or Greek activities, binge drinking, drug use, and other types of damaging behaviors, taking place on campuses. These criminal actions, along with the media attention they have garnered, have tainted the image of college campuses. This is not to say that crime on campuses has actually increased. Due to the combination of new regulations requiring universities to report crime on their campuses, and the media attention that this has attracted, public perception may be that campus crime is on the rise. Some describe “the ivory tower as a dangerous environment” (Fisher 1995). Joel Epstein (2002) states in his article that most of extreme incidents are widely reported, but that “*Most colleges and universities, however, confront far more routine forms of student violence on a daily basis*” (p. 93).

College campuses have become such a focus for studies of crime and fear of crime, that Bonnie Fisher, one of the most prolific researchers in this field, along with her co-author, John J. Sloan, argue in their recently published book, *The Dark Side Of The Ivory Tower* (2011), that campus crime has been elevated to the status of a new and distinct social problem. Their assertion regarding campus crime as a new social problem is based on the idea that the attention garnered by the media, policy makers, researchers, and certain groups, has elevated the topic to a status so extraordinary that it requires special attention. Fisher and Sloan assert that the concept of campus crime has been socially constructed. In their book, Fisher and Sloan (2011, 32), suggest that it is not the public who is calling attention to the problem, but rather “certain groups making claims ...use a variety of tactics to convince the public.” Fisher and Sloan call attention to the idea that, when discussions regarding college campuses are undertaken, most often the talk is about crime, and more specifically, the violence that has occurred on campuses. The mass shootings at Virginia Tech, in April of 2007, Virginia’s Appalachian School of

Law, in January of 2002, the October 2002 mass shooting at the University of Arizona Nursing College, and even the long ago (August 1966) mass shooting at the University of Texas at Austin, all reveal what can happen on a college campus. The disappearance of still missing female, Indiana University student Lauren Spierer, the murder of Annie Le of Yale University, whose body was found stuffed in the wall in the basement of the laboratory building on campus, and the murder of a campus security officer, and the suicide of his apparent assailant which occurred, once again, at Virginia Tech and the most recent campus incident, a former nursing student shot ten people, seven of whom died, at California's Oakland Oikos University, are merely the most recent, and highly publicized examples of some of the violence to which college students are exposed.

This study looks at twelve specific locations on a Midwest urban college campus, and seeks to assess students' fear of criminal victimization while on campus at each of these locations. Six of these locations were selected because they have been identified by U of L students who participated in 2001 study (Bledsoe and Sar) as the most unsafe places on campus. The remaining six locations were chosen because they were the six locations, at which the greatest number of crime reports were taken, according to the 2011 crime logs published by the campus police.

This study is focusing on three specific areas of interest. The first issue to be considered in this research is, if any certain demographics (gender, class status, race, course load, housing status, previous victimization experience, and participation in social life) have an impact on respondents fear levels, for these twelve locations. Does class status (e.g. being a freshman versus being a sophomore) have an impact on fear? The second research question is, are students more fearful at the 2001 locations or at the 2011

locations? To answer this question I will calculate the mean scores of respondents total fear levels and compare the means from 2001 locations to the 2011 locations. The final research question in this study will attempt to determine which if any of the three types of locations depicted in the photographs (buildings, open spaces, and walkways), generate the highest fear levels.

CHAPTER II

LITERATURE REVIEW

Extensive literature on the fear of crime relationship has been developing for more than four decades. To include a complete review of all of the literature on fear of crime is beyond the scope of this study. However, literature that is most relevant to this study can be found in the following sections.

Prospect, Refuge, and Escape

Researchers Bonnie Fisher and Jack Nasar (1992) argue that the exterior environment may impact an individual's fear of victimization. Using previous work from Goffman (1971), Warr (1990), and Jay Appleton (1975), Fisher and Nasar, "propose three features-prospect, refuge, and escape-as having an impact on pedestrian behavior and feelings of safety" (p. 37). Goffman (1971) argues that when entering, or about to enter, a location or space, people instinctively search for cues to danger. In an attempt to avoid potential danger, people will try to find an escape (Warr 1990). Jay Appleton (1975) suggested that humans favor spaces that give an open view (prospect), with options for seeking protection from potential danger (refuge). Appleton (1975) further suggests that one need not be directly in the space to assess the openness or ability to offer protection, but that humans can recognize the idea of prospect and refuge by inferring its qualities. These inferences would be as a result of "secondary vantage-

openness allows them a clear view of potential targets, while the refuge areas allow them a hiding place from which to launch their attack.

Fear of Crime & Demographics

In an attempt to explain “fear” of crime, a study by Box *et al.* (1988), constructed a model using past literature to identify factors, or variables, that contribute to the “deep-seated sense of personal anxiety” many people experience when considering their risk of being criminally victimized. In their study, Box *et al* argue that, over the previous two decades (1960s and 1970s), social scientists had “discovered” that fear of crime is a “major social problem.” Using data from the second British Crime survey, they argue that many variables, such as gender, age, race, neighborhood cohesion, confidence in the police, levels of incivilities, past victimizations, perceptions of risk, and assessments of offense seriousness, all combine to form a theoretical account of “fear.”

Warr and Stafford (1983) argue that “the proximate cause of fear seems too obvious to merit discussion: one becomes afraid when confronted with the apparent likelihood that victimization will occur” (p. 1033). However, Farrall and Gadd (2003) argue that the real issue is not about which variables can explain why people fear crime, but why has fear of crime become “such a hot topic” (p. 23)? It is not that people do not feel fear, the authors suggest, but that the feelings of fear are short-lived and therefore attempts to measure feelings of fear may exaggerate the level and depth of fear of crime.

An article by Mark Warr (2000), notes that “there are sound reasons for treating crime and fear of crime as distinct social problems”(p. 451), and that “criminal events, at their most elemental level, are *frightening* events” (p. 452). Referencing a study by Skogan and Maxwell (1981), Warr states the “Criminal events capture the attention of the

general public in a way that few other events can” (p. 452). The American public is constantly inundated by the news accounts of criminal activities. Television newscasts, newspaper headlines, and instant alert messages from local and national news agencies, all parts of the mass media, provide the public with a steady recounting of criminal events that Warr characterizes as a “distortion in news coverage of crime.” Noting that the more serious the crime, the less often the crime occurs, Warr argues that news accounts of crime depend on their “newsworthiness” and therefore, the more serious the crime, the more likely it is to be reported on by the mass media, and “that crimes receive extraordinary emphasis in the mass media” (p. 467). As noted by Warr, hundreds of studies found that the public’s “fear of crime” is more common than the actuality of having been a victim of crime.

In the volumes of research about fear of crime, the key question, as noted by Warr (1990), is “Who is afraid?” According to Warr, it is evident that most of the research has been focused mainly on demographics such as gender and age (e.g., Stafford and Galle 1984; Warr 1984; Alston 1986). Noting that research on fear of crime is becoming much more specialized, Warr suggests that this specialization may lead to overlooking “sociologically significant questions,” such as “how are risk judgments formulated when it comes to crime” (p. 892). Warr argues that the social and physical environment is what leads individuals to perceive danger and fear becoming victims of crime. As noted by other researchers (e.g., Austin and Sanders 2007; Fisher and Nasar 1992; Pain 2000; Skogan and Maxwell 1981; Wilson and Kelling 1982), various environmental cues send signals to individuals of the potentiality of personal danger, and therefore, affect an individuals’ fear of crime.

In a study conducted by Austin, Furr, & Spine (2002), the authors argue that a majority of the research conducted on fear of crime is primarily concerned with who is most concerned about their safety, and what situation is likely to cause concern. In their study, Austin, Furr, & Spine posit that a number of variables impact an individual's fear of crime, and that these variables can be divided into three distinct categories. The first is the effects that demographics (e.g. age, gender, SES) have on fear of crime, followed by victimization experiences. The third category would be the physical condition of the setting.

It is evident from past research that multiple factors may play a role in an individual's fear of crime. Next, we will look at the literature regarding fear of crime by gender.

Fear of crime-Gender

A consensus among researchers, over the past 25 years, has established that gender is the most powerful predictor of fear of being a victim of crime (Warr 2000; Schafer *et al*, 2006), and it is the fear of sexual violence and harassment that is the foundation for women's heightened fear (Warr 1985). Elizabeth Stanko (1995) argued that when discussing fear of crime, surveys have been including more about women's fear of crime than about men's, and that "beyond any doubt, the gender differential is the most consistent finding in the literature on fear of crime" (p. 48). Stanko states that the questions appearing on surveys typically assume that women's fear of crime is based on actions happening outside of the home, pointing out that the most popular question at that time on surveys was, "How safe do you feel walking alone in your neighborhood (in this area) after dark (or at night)"(p.48). That women are more afraid of becoming victims of

all types of crime has easily been established, but it is their perceived risk of being a victim, and their fear of rape in everyday life, that is the foundation of their fear (Ferraro 1996). Ferraro addresses the questions of why the findings of studies about fear consistently support the concept that women are more fearful of becoming victims of a crime than are men, despite the fact that men are the victims of criminal activity more often than are women in all crimes except sexual assault (rape).

Ferraro notes that multiple studies have found that gender is by far the most important predictor of fear of crime. Ferraro further notes that a study by Karmen (1991) revealed that women are more afraid of all types of crime (not just sexual assault) than are men. Ferraro argues that it would be expected for women to be more afraid of being sexually assaulted than men, but for women to be more afraid of all other crimes than men indicates that there is a difference in how fear impacts women differently than it impacts men. The results of Ferraro's study show that "women are more afraid of all victimizations, but this is principally due to their perceived risk of such offences and their fear of rape in everyday life" (p.667). Further, constrained behaviors were found to have significant influence on the fear of victimization. That is, respondents had a higher degree of fear precisely because they altered their routines and behaviors in an attempt to lower their risk of being victimized.

Arguing that reported levels of fear for women are three times higher than the levels of fear that are reported by men, Stanko (1995) notes that women's risk of personal violence (especially assault) is lower than men's, as claimed by "all official sources," and that young men, who are reported to "feeling safest," are in fact "the greatest proportion of personally violent victimization" (p. 48).

In attempting to explain the basis of women's fear of crime, Stanko first looks to Skogan and Maxfield's (1981) findings, which state that some evidence suggests that it is the social and physical vulnerability of women, more specifically a woman's fear of sexual assault, that "reduces feelings of safety among young women" (p. 48). This is also supported by Ferraro's (1996) findings and that "a women's fear of crime is a reflection of women's sexual integrity at risk" (p. 57). Stanko next turns to Mark Warr (1984) and his argument that "fear of crime is fear of rape" (p. 48). Given both of these arguments, that a woman's fear of crime is related to fear of rape, or to fear of sexual assault, Stanko asks, how then do we "explain such widespread fear in the context of low number of recorded rapes" (p. 48)? The answer she offers is twofold. First, the fear of rape is not founded in actual victimization experience, but that women "feel at greater risk of rape." Secondly, that crime against women, especially sexual violence such as rape, are either underreported or underrecorded. Stanko argues that crime surveys, and the "study of crime," focus primarily on the dangers women face from "stranger danger," and fail to take into account the types of dangers a women faces within her own home from men that are either members of her family or someone with whom she is familiar. Another researcher that Stanko cites, Rachel Pain (1993), found in her study that women speak about the potential violence they fear as stranger danger, even though they were victims of domestic or intimate assault. Past research has shown that women's assailants are most likely to be men that are known to the victim (Pain 2002, 1997b; Crawford *et al.* 1990; McLaughlin *et al.* 1990).

One of the consequences of the fear of crime that women constantly face is the development of coping through constrained behaviors, or avoidance strategies, for

staying safe. In essence, women must “police themselves” (Stanko 1995) by restricting their activities or constraining behavior (Warr 2000). Women are constantly being socialized through crime prevention campaigns, or are given “good advice” on how to avoid becoming a victim. These tactics make it clear that avoiding crime or victimization is the responsibility of the individual. Women are told to engage in tactics, such as not walking alone at night, not even leaving their house (Skogan and Maxfield 1981; Warr 1994), or not dressing provocatively. They are told to monitor their alcohol intake so that they stay alert and vigilant to unwanted advances. Arguing that women, and their safety strategies, are not always successful in warding off victimization, Stanko claims that this is not a commentary on women’s failures, but a commentary on men’s violence. In fact, as noted above, the study by Ferraro (1996) found that constrained behavior by women actually increases the degree of fear that women feel.

Women’s fear of sexual violence is impacted by the images and news reports in the media, circulating rumors, past personal victimization, vicarious victimization (friends or family members), and warnings from others regarding sexual danger (Pain 2000; Stanko 1990a; Valentine 1992; Goodey 1994; Ferraro 1996). Box, *et al.* found, like most other studies, that women are more fearful than men in every age group, but that the “gender-fear gap narrows as people grow older” (p. 352). The problem regarding fear of crime is not the absence of knowledge (risks associated with many criminal offenses), but the failure of public officials and criminologists to present to the public the “reasoned and understandable versions of the facts of crime” (Warr 2000:483). Warr contends that this gap between knowledge and awareness is dangerous.

In an article by Elizabeth Stanko (1995), the author suggested that articles need to be undertaken exploring men's fear of crime, given that research data consistently shows that men, more specifically young men, make up the largest percentage of victims of personal crime. Perhaps taking a clue from Elizabeth Stanko's suggestion, regarding a need for the exploration of "men's fear of crime," is what prompted the study from Kristen Day, Cheryl Stump, and Daisy Carreon (2003).

The heightened emphasis on research regarding women's fear "makes good sense" particularly since women report higher levels of fear concerning public spaces, according to Day *et al* (2003). However, current "environment-behavior researchers have largely overlooked men's fear in public spaces" (p. 311). Citing the 2000 statistics from the US Bureau of Justice, Day *et al* (2003), noted that women report higher levels of fear in public space, compared to men, even though women face greater danger of being victims of violence from domestic disputes and sexual assault in the privacy of their homes. When asked about being afraid to walk alone at night in their neighborhood, 52% of American women, and only 23% of American men, indicated that they felt fearful (US Bureau of Justice Statistics 2000).

These statistics belie the fact that it is men who are more likely to be victims of crime in public spaces than are women (Harris and Miller 2000; Baumer 1978; DuBow, McCabe, and Kaplan 1979). According to Day *et al.* (2003), men's fear regarding public spaces has its foundation in being in unfamiliar territory. Either getting lost, or being in a new location, seemed to increase the anxiety that men felt. Knowing exits or escape routes in familiar places helped men "feel better able to handle potential conflicts" (p.

315). Having the ability to “be prepared,” through heightened awareness of their surroundings, was an important determinant of their feeling of safety.

Another significant source of concern for young men is the fear of confrontation. Having to prove oneself, or participate in verbal or physical confrontations, particularly involving strangers, is often recognized as a “principal threat” to the safety of men in public spaces. Where women are often called upon to engage in avoidance measures for their “own safety,” men also make use of avoidance strategies. Avoiding places, or situations, that suggest a high probability for confrontation, avoiding behaviors that would provoke confrontation from others, and staying in groups in public spaces, are three of the avoidance measures that men often employ to feel safe. Similar to studies regarding women, the Day *et al* (2003) study found that men frequently restricted their activities to spaces where they felt safe, and avoided spaces that they felt would lead to “loss of control or to confrontation.”

As noted by Pain (2000), in his study, I.M. Hay (1993) suggests that men’s fear leads to the use of avoidance measures when discussing behavior and use of space. For men, according to Pain, the fear of crime causes them to compromise not only their independence, but also their self-confidence. Pain (2000), citing Gilchrist *et al.* (1998), argues that recent studies are uncovering higher rates of male fear than was expected, and that the emphasis on females being the most fearful gender could be in question. Robbie Sutton and Stephen Farrall (2005) argue that males may actually be more afraid of crime than are females, but fail to report their actual fear of crime due the social pressures to maintain a strong image. As previously stated, it has been noted that there is a scarcity of research regarding males and their fear of crime (Stanko1995), and Pain (2000) suggests

that men's low reporting, or reluctance to give answers to survey questions on fear, may be hiding their vulnerabilities which they may feel will challenge their male identity (Crawford *et al.* 1990).

Fear of crime- Race

Rachel Pain (2000) suggests that "those who feel at risk may experience particular spaces as particularly threatening" (p. 373) and the response to the threat of these spaces may be self restrictions, segregation, and isolation. This process plays an important role, by creating a situation of "social exclusion" of the stereotypical "others." These stereotypical others "can be marked by color, class, or some other impurity," but the implication is that their presence "threatens the disorder to mainstream life and values" (Sibley 1995:373). And, as noted by Pain, these social "others" may be both feared and fearful. According to the Commission for Racial Equality (1987), and Mayhew (1989) as noted by Pain (2000), ethnic minority groups have experienced significantly higher rates of victimization, which is consistent with the findings by Box *et al.* (1988). Another study by Sloan, Fisher, & Wilkins (1996) reported that "African Americans, as compared to other races, had a higher probability of perceiving themselves at risk for victimization."

In discussing race and fear of crime, criminology textbook author Sue Titus Reid makes a point of recommending further studies in "the relationship between race and the fear of crime" (p. 231). Referencing statistics from the Bureau of Justice Survey, which indicate that African Americans are three times more likely than whites to express fear of crime in their neighborhoods, Reid also notes that African Americans are seen as "symbolic assailants," that their presence in large numbers evokes fear of crime, even

when the crime level is not high. This supports Pain's assertion about "others" being both fearful and feared.

Fear of Crime and the Physical Environment

Incivilities and physical cues

Few would argue that one of the key factors to an individual's fear of crime could be the physical environment in which the individual finds themselves, or is about to enter. As noted by Austin & Sanders (2007), a study by Adu-Mireku (2002) argues that neighborhood incivilities (e.g. trash, abandoned buildings, gang-related graffiti), may impact an individual's feelings and perceptions about their physical surroundings and actual crime. These types of conditions impact an individual's fear, interpretations of the degree of seriousness of crime, and their level of perceived risk, as noted by Austin, Furr, & Spine (2002), referencing research by (Boorah and Carcach 1997; LaGrange, Ferraro, and Supancic 1992; Rountree and Land 1996; Skogan and Maxfield 1981). In an article written by Wilson & Kelling (1982), they assert the idea that small details in the physical surroundings, such as broken windows, play an important role in the overall perception of safety in any given environment. Research from Skogan (1990) further supports the suggestion that a relationship exists between crime and environmental incivilities, by arguing that situations such as burned buildings, gang graffiti, and abandoned cars can be indicators of danger to individuals, as noted by Austin & Sanders (2007).

However, other researchers argue that it is a spurious relationship, and not a causal linkage, that exists between public social disorder and crime, Sampson and Raudenbush (1999). Robinson, Lawton, Taylor, and Perkins (2003) suggest that as fear increases for the individual(s), these displays of social disorder (e.g. boarded-up

buildings, broken windows, vandalism) may begin to be viewed in a more frightening light. According to Nolan, Conti, and Mc Devitt, (2004), the association between the neighborhood environment and crime, and its causal relationship, has been challenged. However, evidence demonstrates that distress over incivilities and crime appear together among neighborhood residents, leading them to infer these conditions to be “signs of crime” (Kanan and Pruitt 2002:541), regardless of causality or mere correlation, as noted by Austin and Sanders (2007).

According to Pain (2000), “people commonly report fear of personal and property crime being heightened when they are in particular environments” (p. 369). Considerable fear can be produced, according to Warr (1990), when an individual is faced with both the “novelty” (walking through an area you have never walked through before) and “darkness,” noting that nighttime can transform a situation from a comfortable one into a frightening one. This is consistent with the findings reported by Skogan and Maxfield (1981) that people, especially females, are more fearful at night than they are during the day (Taylor 1999; Valentine 1989; Fisher and Nasar 1995, 1992c; Brantingham *et al.* 1995).

Other researchers have focused on additional factors that impact appearance of incivilities such as lighting. Brighter lighting may improve feelings of safety (Painter 1992) but may be countered by the idea that brighter lighting illuminates the various incivilities, making the disorder of the surroundings more noticeable (Herbert and Davidson 1995), acknowledged by Pain (2002). Fisher and Nasar (1995) acknowledged that Merry (1981) “argued that it is the cognitive assessment of cues that leads an individual to anticipate harm or danger in the environment” (p. 216).

For Fisher and Nasar (1992, 1995), it is the micro level features (prospect, refuge, and escape) that are associated with fear of victimization. The will to survive is man's greatest instinct, and according to Goffman (1971), "individuals seem to recognize that in some environments, wariness is particularly important, constant monitoring and scanning must be sustained, and an untoward event calls for a quick and full reaction" (p.242). Goffman further states that humans "have a capacity for picking up signs for alarm" (p. 250-251). The signs of alarm could be generated from cues such as darkness due to nighttime, or walls of shrubbery obfuscating one's view (Fisher and Nasar 1995). In another study by Fisher and May (2009), a random sample from a college population, (faculty, staff, and students), were asked why they were fearful on campus. Responses revealed issues such as too many bushes, bad lighting, hiding places, limited entrance and escape, dark hallways, and no escape routes.

When considering the physical nature of a particular location in researching fear of crime, the work generated by Fisher and Nasar (1992) argued that "places that afford offenders refuge, and victims limited prospect and escape will be seen as unsafe" (p.40). This study offers evidence that exterior design features affect perception of safety. The term "prospect" (Appleton 1975) refers to a person's ability to view the openness of the space they are currently occupying or are about to enter. Goffman (1971) introduced the term "lurk lines" to explain those areas where the line of sight is broken, suggesting blind spots or areas where there is limited prospect. These blind spots might be building columns, alcoves, trees, shrubbery, signage, and other objects, which may block a person's view of space they are either currently occupying or about to go into, and they

“may serve as cues to danger or risk” (Fisher and Nasar 1995:216). These blind spots may serve a dual purpose.

The first is that they may offer an individual a place to seek refuge if the individual feels threatened, and conversely, that same space may offer potential offender(s) a place to hide or conceal their location in wait for an unsuspecting victim on which to prey. A third consideration is that of escape. As noted by Fisher and Nasar (1992), “boundedness is a feature of the physical environment shown to provoke fear” (p. 220) and that a person’s feeling of safety is impacted by the extent of their ability to escape. Arguing that “places such as campuses, which have a pronounced fear of crime,” Fisher and Nasar (1992) concluded that “fear of crime was highest in areas with refuge for potential offenders and low prospect and escape for potential victims” (p. 232).

Fear of crime on a college campus

While many studies (Epstein, 2002; Schwartz, DeKeseredy, Tait, & Alvi, 2001; Nicoletti & Spencer-Thomas, 2010) focus on the criminal activities that may happen on a college campus, several studies have begun to pay close attention to the actual physical environments found on a college campus. One such study conducted by Nasar, Fisher, and Grannis (1993), suggested that certain physical features may contribute to a climate of fear on campus (e.g. the open park like nature of the campus, urban campuses that border neighborhoods that have social disorder, signs of incivilities such as trash and graffiti) and that college campuses are responsible for any of the physical elements found on campus that facilitate criminal activity. Another study, authored by Nasar & Fisher (2000) examined fear of crime for specific locations. In it, they examined how prospect (openness), refuge (hiding places for either the individual or potential offenders, or

escape (opportunities for the at-risk individual to escape) impacted perception of safety in that location. The college campus, as noted by Nasar & Fisher, allows for potential offenders to go virtually unnoticed. A college student body, as well as the faculty and staff, is generally very diverse in terms of age, race, ethnicity, SES, and other types of characteristics which could be used to describe a university population. Given the diversity of a campus population, and the fact that campuses offer unlimited access and mobility, these factors combine to create a great many opportunities for criminal perpetrators to prey upon the campus population. Couple these factors with that of any worrisome physical elements such as poor lighting, overgrown foliage, obscured lines of sight, that can often be found on a college campus, and you have a situation that may lead to an increase in incidents of crime, and pose threats to the safety of the student body, faculty, and staff.

Each fall, university campuses across the nation ready themselves for the influx of, not only the returning students, but also their portion of the current 2 million college bound high school graduates. As they look to the future, their hope is that their college will be the college of choice for many of the 49 million students that may be college bound in the future years (National Center for Educational Statistics, NCES, 2012). One of the key elements in choosing a college, for both the students and their parents, is campus safety. As previously stated, for the last twenty years there has been increasing awareness and concern regarding criminal activity and violence occurring on campuses. The coverage of these incidents by the mass media, and the constant retelling of the events, may be giving an exaggerated representation of the dangers college populations encounter.

Social Policy

It is not that criminal activity never occurred on college campuses prior to the 1980s; it is that the criminal actions that did occur were easily minimized and dismissed without public knowledge, or the requirement of public accountability. This issue of non-transparency would be corrected by the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, which was enacted as part of the Higher Education Act of 1965. This law is currently known as the Student Right-to-Know and Campus Security Act of 1990.

The Student Right-to-Know and Campus Security Act require colleges and universities to disclose campus crimes and security policies. The disclosures are presented as annual reports, and it is required that campuses supply current and prospective students with access to both the policies, and the reported campus crimes, through the internet, or by paper copy of this annual report. Crime statistics for all areas defined as “on” campus, and all areas not directly on campus but affiliated with the colleges or universities (Greek facilities or housing and residential housing), or areas adjacent to campus (public property, sidewalks, streets), must be included. Also included in this law, and subsequent amendments to this law, is the requirement that students be given “timely warning” of criminal activity that may pose an ongoing “threat to students and employees.” For the University of Louisville campus, these “timely warnings” come in the form as warning texts, delivered directly to the phone of any student, faculty, or staff who has registered their personal phone number with Campus Security, and/or their campus telephone and email address. Recent news accounts by the Associated Press have disclosed that Virginia Tech was assessed a \$55,000 fine by the

U.S. Department of Education for the delay in notifying students and faculty of the security threat on campus, where a student gunman committed the “most deadly mass shooting in modern U.S. history” (Szkotak, 2012).

Colleges and universities must also allow access to the more extensive crime log that is kept by campus security of all incidents *reported* to the campus police. These campus crime logs, which are categorized by month, can be found on the Campus Security website (<http://louisville.edu/police>). It is this annual report, and those crime logs that are supposed to give transparency to the reported crimes that have taken place on and around all college campuses, allowing students and prospective students, and their families, insight into how dangerous is the environment of the ivory tower.

Crime statistics regarding rape and date rapes on college campuses indicate that the number of these crimes continues to escalate, according to “The Sexual Victimization of College Women” (Fisher, Cullen & Turner 2000). This study, funded by both the National Institute of Justice and the Bureau of Justice Statistics, found that “college campuses host large concentrations of young women who are at greater risk for rape, and other forms of sexual assault, than women in the general population, or in a comparable age group” (p. 4). Fisher and her colleagues estimate that campuses that host 10,000 or more female students could experience more than 350 more rapes a year than 10,000 females of similar age, located in the general population outside of the parameters of a college campus. According to Fisher *et al*, the growing interest in the victimization of female college students is as a result of the increased interest in female victimization in general.

The Student Right-to-Know and Campus Security Act, also known as The Clery Act, grew out of the rape and murder of a young female college student attending Lehigh University in Pennsylvania. After her death, Jeanne Clery's family discovered that the university had prior knowledge of several incidences of violent crimes that had occurred on campus, and that the dorm in which Clery resided had reported a problem with doors being propped open, allowing anyone access to all of the students who lived there. According to the website, Security on Campus, Inc., (<http://www.securityoncampus.org/>) until 1988, the number of American colleges and universities who reported crime statistics to the FBI amounted to only four percent. Keeping the image of college campuses as an "ivory tower" was paramount to most university officials. Security on Campus, Inc. asserts that there were at least 31 murders on college campuses, nationwide, in 1987. The site further claims that there were over 1,500 armed robberies, and 13,000 physical assaults, for that same year. As of this writing, thanks to the Clery Act, universities and their administrations are held to a higher standard regarding the reporting of crimes that are *reported* on their campuses.

The Bureau of Justice Statistics, the statistical agency of the U.S. Department of Justice, produces the often cited National Crime Victimization Survey (NCVS). This survey produces a data set that researchers are able to use to study not only the victimization of the American public in general, but can also be used to study the victimization of college students specifically. One such report, *Violent Victimization of College Students, 1995-2002*, by Katrina Baum and Patsy Klaus (2005), is a study of crime against college students, as compared to crime against nonstudents of a similar age. In their study, they argue that, for females, nonstudents were over 1.5 times more likely

than a college student to be a victim of violent crime. This finding is a direct contradiction to the findings reported by Fisher and her colleagues, in her 2000 study, *The Sexual Victimization of College Women*, which was cited earlier in this paper. The obvious differences in their findings may be as a result of their using different data, resulting in conflicting conclusions.

Campus crime data found on the U.S. Department of Education website, *The Campus Safety and Security Data Analysis Cutting Tool* (<http://ope.ed.gov/security/>), allows the public access to statistical data of the specific criminal offenses, as required by the Clery Act, that have occurred on campuses across the nation. The crimes that campuses are required to report are murder, negligent manslaughter, both forcible and non-forcible sex offenses, robbery, aggravated assault, burglary, motor vehicle theft, and arson. For the year 2010, according to this source, the reported criminal statistics for all campuses, when totaled, resulted in the following ranking: 1st burglary (22,166 offenses), 2nd motor vehicle theft (4,339), 3rd sex offenses-forcible (2,930) (defined as: any sexual act directed against another person, forcibly and/or against that person's will; or not forcibly or against the person's will where the victim is incapable of giving consent), 4th aggravated assault (2,530) (defined as: an unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault is usually accompanied by the use of a weapon or by means likely to produce death or great bodily harm), 5th robbery (1,817), 6th arson (740), 7th sex offenses-non-forcible (35) (which is defined as: unlawful, non-forcible sexual intercourse), 8th murder/non-negligent manslaughter (15) and 9th negligent manslaughter (1).

For the University of Louisville, for the year 2010, the reported statistics from this source paint a picture of relative safety. Of the nine offenses tracked by this site, the most common on this campus was burglary (17), followed by motor vehicle theft (4), arson (2), and (1) for each of the offenses of sex offenses (forcible), and aggravated assault. Table 1 shows the comparison of the reported crimes, for 2010, of three universities that are in close proximity (within 120 miles) to the University of Louisville campus.

Table 1. Reported Crimes on campus in 2010

	University of Kentucky	University of Cincinnati	Indiana University	University of Louisville
Murder	0	0	0	0
Manslaughter	0	0	0	0
Sex offense-forcible	8	7	15	1
Sex offense-non-forcible	0	0	1	0
Robbery	11	10	4	0
Aggravated Assault	8	14	7	1
Burglary	27	92	52	17
Car theft	6	1	7	4
Arson	2	1	2	2
Total	62	115	88	25
Student enrollment	26,295	31,134	42,347	21,234
Total crime rate per 1,000 students	2.36	3.69	2.08	1.18

2010 The Campus Safety and Security Data Analysis Cutting Tool

April Woolnough states, in her 2009 fear of crime study, that “crime on campus is a daily occurrence” (p. 41). However, one must then conclude that, if crimes are indeed committed on every campus each and every day, then not all crimes are being reported.

This is evidenced by the crime incidences report for the three schools noted above, as well as for the University of Louisville. The University of Kentucky reports the highest number of criminal incidents (125), which accounts for about one third of a calendar year, if each of those offences occurred on different days. This underscores the “weaknesses in the data collection methods and the usefulness of the required crime reports” (Woolnough 2009:41). Woolnough further argues that these weaknesses reduce the value of the information about campus crime, generated by the Clery Act. Bonnie Fisher (1995), as noted by Woolnough, claims that “the required reporting overemphasizes violent crime on campus, yet excludes theft and other crimes that are more prevalent” (p. 41).

Perhaps this “overemphasis” on the reporting of only “violent crimes” causes there to be a similar exaggeration about the dangers faced by college students. If the findings by Baum and Klaus are indeed reflective of the real exposure to violent crime that college students face, that nonstudents are in greater danger of experiencing violent crime than are college students, then Fisher and Sloan’s claims, that the new “social problem” *campus crime*, and its construction at the behest of specific activist groups, needs to be taken into account when considering the true dangers students face while on a college campus. Fisher and Sloan assert that these groups, Security on Campus, Inc. (SOC), “campus feminists and their allies,” past student victims and their families, and the public health researchers who have identified college binge drinking as a serious problem threatening the ivory tower, together formed a foundation of “claimsmakers,” who, with the aid of the mass media, moved awareness of *campus crime*

off the campus, and into the general public arena. No longer could *campus crime* remain a campus issue. It is now a public issue.

Institutional policy makers, college administrators, campus security organizations, parents, students, and prospective students, now each have the added responsibility of negotiating through the complexities of “safety” on campus. Each of these groups is responsible for integrating the threat of victimization into their domain. Institutional policy makers, college administrators, and campus security, must skillfully balance the “realities” of *campus crime*, with the “perceptions” of *campus crime*, when creating policies for campuses. Students, parents, and potential students, must not only navigate their way through the myriad of truths, half truths, and lies of omission (unreported), about crime on a campus, but they are also expected to manage their exposure to victimization. Students are repeatedly being informed about potential victimization.

According to the Clery Act, the required reporting of crimes on campus, alerts, or warnings, “must alert the campus community of certain crimes in a manner that is timely and will aid in the prevention of similar crimes.” While there is no formalized system of how warnings are to be disseminated, many campuses use phone text (which students must opt-in to receive), or emails (to campus and any private email addresses, again, opt-in), to spread the alarm. It is the use of the wording, “timely warning,” as stated in the Clery Act, that gave rise to the previously mentioned \$55,000 fine, levied on Virginia Tech, for the reportedly four hour delay in notifying the campus community of the shooting rampage that occurred in 2007.

However, another consideration is the use of the wording, “certain crimes.” When first employed, the alerts (texts) for “crimes” occurring on one campus in particular, seemed to be deployed at such a rate that, according to one official, the students were complaining that “constantly” being notified about every incident was bothersome. Fearful that students would become so desensitized to the threat of crime by the multiple alerts, the officials have decided that the “message system is to be used for situations in which the campus community may be exposed to a serious and immediate danger.” Now, students are, once again, reliant on some security or university official’s determination of what rises to the level of *serious and immediate danger*, to which the campus community is exposed. And what, if anything, are the students supposed to do about it?

There can be little doubt that students are constantly being alerted to “dangers” that lurk on campus. Every day, they are faced with the prospect of becoming victimized in some way. Female students are constantly being socialized by the media, by parents, and by warning posters distributed by feminist organizations, alerting them to be vigilant to situations that could result in rape, date rape, and all manner of sexual victimization. Both male and female students are repeatedly cautioned about drinking, and the concern regarding the rise in binge drinking. Students face danger in joining certain organizations on campus, due to the undisclosed hazing rituals associated with membership. Yet, with all of the “dangers” students and members of the campus community face, and the perception of college campuses as being “unsafe and violent” (Fisher and Sloan 2011), the institutions of higher education still remain an “ivory tower,” where so many still seek to gain entrance.

Past research has shown that visual experiences of space have an impact on one's perceived level of safety (Austin & Sanders, 2007), and physical experiences of spaces or sites impact a person's fear of crime, depending on the variability of the factors prospect, refuge, and escape that each particular space offers (Fisher & Nasar, 1992). This research seeks to determine if the six specific sites on campus that had been cited as the most fear provoking location on campus in the 2001 study (Bledsoe & Sar) remain the most fear provoking locations on campus, or if the six specific sites on campus that, according to campus security, have the highest rates of crime for U of L campus for 2011, will be the more fear provoking locations. This study also hypothesizes that women will have higher fear levels than men, that freshman will be more afraid than students in the other class statuses (sophomore, junior, senior, and post grad), and that respondents who reported having experienced being victims of property and/or violent crime will be more afraid than respondents who reported having no prior victimization experiences

CHAPTER III

THEORETICAL FRAMEWORK

This study was guided by three theoretical approaches, each of which has been used in previous “perceptions of fear” research. Each of the following theories, Routine Activity Approach, Broken Window Theory, and the Concentric Zone Theory is discussed below.

Routine Activity Approach

The Routine Activity Approach (Cohen and Felson, 1979) argues that there are three elements which combine to make the occurrence of criminal activity a possibility. First, is the need for the presence of likely offenders, individuals who are motivated to commit crime. The second element is potential targets. Targets can be people, or belongings, that a potential offender covets. The third requirement is the absence of people in the area, whose presence may deter the crime from occurring, be it a police presence or others in the vicinity.

Broken Window Theory

The Broken Window Theory authored by James Q. Wilson and George Kelling in 1982, argues that a small indicator, such as a broken window that has not been repaired, is a sign of social disorganization. Wilson and Kelling posit that situations, such as minor criminal activities, signs of physical decay, or physical incivilities (graffiti, trash,

broken windows, and other signs of disarray) which have not been dealt with swiftly, upset the balance of social organization, drawing would-be offenders to the area and, thereby, allowing criminals and crime to flourish. The authors also suggest that police involvement is necessary to reduce the human elements of crime (drug dealers, beggars, vagrants, prostitutes, and others criminal types), in order to maintain law and order.

Concentric Zone Theory

Using the Concentric Zone Theory Approach, where the city is divided into 5 zones, with zone 1, known as the central business district (CBD) being at the center, researchers Ernest W. Burgess and Robert Ezra Park (1921, 1925), attempted to explain Chicago's high crime rate. They argued that Zone 2, the zone which surrounds the central business district (CBD), is the key zone. Calling this the zone of transition, this area was originally the fringe of the city, and was once the most affluent and prestigious area of the city. Zoning laws changed, which encouraged the more affluent members of society to abandon the area, leaving the houses to deteriorate. As the city grew, zone 2 became more industrialized. This zone is characterized as being filled with low income persons, unskilled workers, and a variety of businesses. These changes led to social disorganization, allowing criminal elements to move in and thrive.

CHAPTER IV

METHODS

Belknap Campus

The demographics of the university campus population reflect a mixture of ages, races, genders, socio-economic status, as well as many other characteristics to numerous to recount in totality. Students, faculty, and staff are constantly moving about the campus, and the area surrounding the campus. It would be almost impossible for campus security to determine who, if anyone, does not belong, or has come to campus to commit a crime. Likely offenders could easily blend in with the campus population, or may even be a member of the campus population, making detection of a criminal difficult. Unsuspecting coeds walking to their cars or living quarters after evening classes, possessions left unguarded in the library, staff and faculty offices, or cars parked in lots on or near campus are just a few of the targets available to would-be criminals.

For the campus and surrounding areas, situations such as litter, graffiti, vacant or occupied buildings in disrepair, or dark streets and alleyways, create an atmosphere where students and members of the neighborhood may conclude the area is in disorder. Social organization then weakens, making residents of the area fearful (Wilson & Kelling 1982). While the U of L campus proper is well maintained and well lighted, some of the contiguous areas, through which many students must travel to either their residence or parking spot, are not.

The University of Louisville's location can best be described as on the border between zone 2, considered to be the zone in transition, which surrounds the CBD of Louisville, and zone 3, the zone of workingmen's homes (Burgess & Parks, 1921, 1925). The area on the north side of the campus features old and very large, stately homes that once housed the city's elite. Most of these have now been renovated into apartments, many of which are occupied by students. The neighborhoods east of the campus are populated with inexpensive small shotgun style homes.

The areas to the south and west are a mix of residential, commercial, and industrial. The population, as suggested by Burgess and Park, is segregated into a mixture of racial, ethnic, and economic factors. The addition of students to the area's resident population has contributed greatly to its diversity. The expansion of the university's student population seeking either on-campus housing or housing in the area necessitated an expansion of available housing options. Apartment complexes, such as The Province, a university affiliated property, The Bellamy, which is independent of the university, and Cardinal Towne Apartments, are just the latest additions to the area. Normally, new additions to an area would indicate a renewal of the area. However, that would be difficult to argue in the case of The Province. This location, according to the U of L campus security website (<http://louisville.edu/police>), which is required to publish all campus crime logs, has the highest number of reported incidents of criminal activity, among all of the areas that campus security are tasked to police. Of other housing locations, Kurz Hall, ranked #2, The Betsy Johnson Apartments ranked #4, and the University Towers Apartments were #6 in criminal activities for the year 2010. This

ranking was calculated using the published campus crime logs, and was verified, as to its veracity, by George M. West, Telecommunications Supervisor, Department of Public Safety, University of Louisville.

The college campus is dotted with classroom buildings, bus stop structures, columns, signs, shrubbery, trees, open expanses of grass or concrete, and other objects that may obstruct one's line of sight, or, conversely offer a clear view of activity. Additionally, the movements on campus of students, faculty, and staff members tend to be quite predictable. Each semester or quarter, they establish a set routine of time and motion. They typically follow the same routes, at the same times, repeatedly. This predictability can make them easier to target. Despite their best efforts, the sprawling nature of most college campuses, and tendency of those campuses to flow into the surrounding neighborhoods, makes the job of protecting all areas of the campus nearly impossible for campus security. The intent of this survey and the use of photographs of specific locations was to determine which locations participants felt were fear provoking and to what level. With regards to participants' responses to the photographs of the buildings, the participants may have been responding to either the area surrounding the building, the building interior, or both.

The Sample

To keep this project to a reasonable time level for participating, the respondents consisted of a convenience sample of registered students enrolled in particular sociology courses at the University of Louisville, which is a public urban university with an enrollment of approximately 21,234 students, (<http://louisville.edu/about/profile.html>) many of whom are commuters. Participants were students, who represented a variety of

majors and were either currently enrolled in particular sociology classes held on Belknap Campus or enrolled in a distance sociology class. Only students who were 18 years of age or older were allowed to participate.

For this study, the sample size was N=235. The mean age of respondents was 20.70 years. Self-identification resulted in 76.6% identified as “white,” 10.1% as “black,” 2.6% as “Hispanic,” and 8.1% as “other.” In terms of criminal victimization, 9 respondents, or 3.9%, reported having been a victim of property crime. The comparable figure for violent crime victimization was also 9 respondents at 3.9%. Characteristics of the sample can be found in Table 2.

Table 2. Sample Characteristics (N=235)

Characteristics	Total Sample %(n)	Sex	
		Females %(n)	Males %(n)
Sex			
Female	68.1 (160)		
Male	29.8 (70)		
Current class status			
Freshman	37.8 (87)	42.5 (68)	27.1 (19)
Sophomore	27.4 (63)	28.1 (45)	25.7 (18)
Junior	16.5 (38)	13.8 (22)	22.9 (16)
Senior	17.8 (41)	15.6 (25)	22.9 (16)
Post Grad	0.4 (1)	0	1.4 (1)
Type of student			
Traditional ^a	92.3 (203)	94.1 (144)	88.1 (59)
Nontraditional	7.7 (17)	5.9 (9)	11.9 (8)
Current course			
Full time	94.3 (217)	96.9 (155)	88.6 (62)
Part time	5.7 (13)	3.1 (5)	11.4 (8)
Resident status			
On campus ^b	50.7 (109)	55.7 (83)	39.4 (26)
Off campus	49.3 (106)	44.3 (66)	60.7(40)
Victimization			
Violent Crime	3.9 (9)	4.4 (7)	2.9 (2)
Property Crime	4.0 (9)	1.3 (2)	19.1 (7)
Participation in			
Social Life ^c	73.5 (169)	72.2(38)	27.8 (47)
Fear of Walk Alone	62.6 (78)	79.6 (62)	20.4 (16)
Fear of Violent Crime	42.2 (72)	88.9 (64)	11.1 (8)
	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>
Age in years	20.70 (4.53)	20.16 (2.96)	21.96 (5.59)

^a Traditional Student (18-24 yrs) ^b On campus (live within 2 blocks of campus)

^cSocial life (attend parties, meetings)

Use of Photography

This study included the use of twelve photographs of locations that were either on or near the Belknap Campus of the University of Louisville, and one photograph of a location that would be unknown to all respondents (the author's backyard) as a control,

for a total of thirteen photographs in the survey. See page 87 of the appendix for all photographs used in this study.

Six of the locations were chosen from a 2001 campus survey conducted by Linda Bledsoe and Bibhuti Sar (2001), regarding safety perceptions and experiences of violence. These six locations were selected from the list of responses to the open ended question posed to students in 2001: "*Are there any specific areas on campus where you do not feel safe?*" (Bledsoe & Sar, 2001: 50). Locations of "*specific places where respondents felt unsafe,*" from the 2001 study, were then divided into three categories: Parking lots and garages, in and around buildings, and walkways and pathways. Some of the specific areas of concern from the list from the 2001 study no longer exist today (e.g. student 4th Street parking lot, the tunnel running under Eastern Parkway, as well as other locations not listed here).

Selection of locations was based on the first two locations per category from that study that still exist today. For the parking lots and garage locations, Floyd Street parking garage and the parking lot next to Papa Johns Pizza were selected. Floyd Street Parking Garage is a four story, two sided parking garage. The southern side of the garage is mainly used by those who have a yellow (live in one of the nearby dorms), or green (upperclassmen with 90 + credit hours), or blue (faculty or staff), or red (long time faculty staff) parking pass, allowing access using a swipe reader. The northern side of the garage is either cash or special pass access. In the center of the parking garage, at street level, is where the University of Louisville Campus Security's offices are located, along with the campus parking department and the university credit union offices.

Papa Johns Pizza's parking lot is located on Floyd Street, between Thrust Theater and Old Eastern Parkway road. Old Eastern Parkway once was a four lane road running between the University of Louisville campus and J B Speed School of Engineering. This east/west thoroughway was a major connector to downtown Louisville for many living in the east end of Louisville. Eastern Parkway intersected with many north/south streets and after major road construction, a new Eastern Parkway overpass was constructed directly atop the Old Eastern Parkway and Floyd Street intersection. The Eastern Parkway overpass over Floyd Street is adjacent to the Papa John Pizzeria and parking lot. Only a small one block section of the Old Eastern Parkway remains under the new Eastern Parkway. This small section serves as another entrance onto campus and Brook Street. Railroad tracks run parallel at ground level with Floyd Street, so when turning onto Old Eastern Parkway from Floyd the road now only two lanes, dips and passes under the railroad tracks. This small section is below ground level and completely out of street level sight, creating a dark tunnel effect. In the center of the two lane road are the support structures for the new Eastern Parkway Overpass with walls that are approximately two stories tall of solid concrete. This area is on the southeast side of the campus is fairly remote from the more populated areas of campus. Only students who park in the pizza parking lot or are at the soccer field across the street or pedestrians who are walking to or from Papa John Cardinal Stadium are usually in the area.

Ekstrom Library, and the area behind J B Speed Art Museum, were used for the areas *in and around* buildings. These two locations are adjacent to each other. Ekstrom Library is located on the west side of the main campus quad. The front of the library faces Third Street, and the rear of the library forms one side of the campus quad. There is

no walkway between the J B Speed Art Museum the north side of the library, only the J B Speed employee parking lot, which is used as a walkway into campus. This small parking area runs along the south side of the museum and around to the back loading dock. The J B Speed Art Museum sits fairly close to Third Street, while Ekstrom Library sits further back from the street. The rear area of the J B Speed Art Museum borders the north side of the library building.

The walkway between the J B Speed Art Museum and the Speed parking garage, and the walkway tunnel located at the corner of 3rd Street and Eastern Parkway, were used for the walkways and pathways category. This walkway is located on the north side of the J B Speed Art Museum and the south side of the J B Speed Museum Parking Garage. The walkway tunnel, located at 3rd Street and Eastern Parkway, passes under a railroad bridge. This walkway is used to access the faculty (blue permit)/student (green permit) parking lot, located across from the Reynolds Loft Apartment building. The tunnel itself is encased in chain link fencing and cement walls. One side of the cement wall, along the street, has three arched openings. The arched wall and fencing are used to shield pedestrians from the north bound cars turning right onto Eastern Parkway.

The final photograph is that of the author's backyard. This photo was included to ascertain if respondents were being thoughtful about each series of questions. Having never been in this location, results for this photograph should reflect that respondents have not been in this location. Photographs of all locations were taken during the day and are generally void of any objects or conditions that could serve as a bias (e.g. darkness, people loitering in the area, or any factors that could influence a person's perspective of the area).

The other six locations were chosen using statistical data supplied by the University of Louisville Security Campus Police. The Province Apartments, Bettie Johnson Hall/Apartments, Papa Johns Cardinal Stadium, The SAC-Student Activities Center, University Towers Apartments, and Kurz Hall were determined to be the six locations where the greatest number of criminal events, were reported. According to the Jeanne Clery Act, universities receiving federal monies must report annually to the U.S. Department of Education, an accounting of any criminal events which either occurred on campus, or in areas for which campus security is responsible for police protection. Using the daily crime logs published on the campus security website (<http://www.securityoncampus.org/>) for the calendar year 2011, it was determined that the six locations listed above, were the locations with the greatest number of reported crimes under campus security's domain. This finding was supported by the statistics generated by the ARMS/CAD system report for the calendar year 2011, supplied by the University of Louisville Campus Police Department.

The Province Apartments are university affiliated apartments. They are not owned by the university, but the owners of the complex have an arrangement with the university for housing university students, and, therefore, the complex security falls under university campus security jurisdiction. This complex is located on the west side area of the university campus. To reach campus from this complex, student pedestrians must use a pedestrian bridge, located at the southern most point of the complex that crosses over railroad tracks which run behind many campus housing areas (fraternity and sorority row), Bettie Johnson Hall, Kurz Hall, and West Hall. This apartment complex is the location farthest from the main campus, and other housing facilities for campus. Bettie

Johnson Hall/Apartments, Kurz Hall, and University Towers Apartments are located on South 4th Street, at the northwest end of campus. These are all university owned housing facilities.

The Student Activities Center, or SAC, is located in the northeast corner of the campus, and is adjacent to the Floyd Street Parking garage. The SAC straddles a railroad track, with one side housing many dining facilities, and the other side dedicated to sports offices, a gym, and other university/student offices. The final location is Papa Johns Cardinal Stadium parking lot. This lot is located at the far southern end of campus, away from housing and university buildings. It is used as a parking facility for students who have a purple parking pass (less than 90 hours). Freshman can only purchase purple passes and access to campus is mainly by busses dedicated to traveling the perimeter of the campus proper, or students may walk approximately $\frac{3}{4}$ mile to campus.

Photographs of these six locations were taken during the day and generally void of any objects or conditions that could serve as a bias (e.g. darkness, people loitering in the area, or any factors that could influence a person's perspective of the area). A map of the university, with the location of each of the twelve sites used in the study pinpointed, can be found on page 90 of the appendix.

This study was conducted using a combination of photography and an online survey service. For respondents who attended class on campus, the survey was administered at the sociology computer lab classroom during their weekly recitation class. For students in the distance education class, and on campus classes that did not meet in the computer lab, an email was sent by their instructor inviting them to

participate in the survey. This research required IRB (Institutional Review Board) approval, which was granted.

Each on-campus student who met in the Sociology Department computer lab was invited to participate, and if he/she agreed, the student was directed to the Sociology Department website (<http://louisville.edu/sociology/>) and the appropriate link to access the survey. This link launched their invitation to participate in the survey and the consent form. For the off campus students who received the emailed invitation to participate, directions were given in the body of the email giving them the link to the survey. Once participants (both on campus and off campus) read the online consent form, and if they agreed to participate, the survey was then launched.

The respondents were instructed to look at each photograph and provide quick and initial response to each, as it appeared on the screen. The first question: *“Are you 18 years of age?”* would, if answered “Yes,” begin the survey, and if answered “No,” would thank the potential respondent for their interest, and explain that at this time they were ineligible to participate. The survey, for them, would then end.

As the first photo of a location appeared on the screen, respondents were asked if they had been in this location at night, and were given four options: Often, Occasionally, Never, and I Don’t know. Respondents were then redirected to survey questions based on their answers. Those answering “Often” or “Occasionally” were redirected to a four question scale, previously constructed by Fisher and May (2009), used as indicators of fear.

While on campus at this location at NIGHT:

- I am afraid of being attacked by someone with a weapon
- I am afraid of having my money or possessions taken from me
- I am afraid of being beaten up
- I am afraid of being sexually assaulted

According to Fisher and May (2009), the first item served as an indicator of fear of aggravated assault, the second item would be fear of larceny-theft, followed by fear of simple assault, and fear of sexual assault. Using a 4-point Likert scale, respondents would either strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each statement, with regards to the photo. The photo of the location remained at the top of the page for each set of questions asked.

Those answering “Never” or “Don’t Know” were redirected to four questions similar to the fear scale used by Fisher and May, but altered to allow respondents to answer how they *think* they would feel if they were in that location at night.

If I were at this location at NIGHT I think:

- I would be afraid of being attacked by someone with a weapon
- I would be afraid of having my money or possessions taken from me
- I would be afraid of being beaten up
- I would b afraid of being sexually assaulted

This process continued for all 13 photographs.

For this study, those who choose the response of “Never” or “I don’t know” if they have been in this location, would be utilizing Appleton’s (1975), “secondary vantage-points” concept to assess their anticipated perceptions of their safety, in those specific locations. The survey then concluded with several demographic questions, (e.g. age, gender, race, class status, and other demographic specifics). Students were asked about their housing status. All university dorms, properties, and university “affiliated”

housing options were listed. University “affiliated” housing is a housing option that the university can offer “by partnering with outside private and community housing developers/affiliates,” according to the university housing website (<http://louisville.edu/housing/housingoptions/oncampus/campus-housing.html>).

Students who did not reside in any of the above options could also choose between; Non-university affiliated apartment/house **within 2 blocks** of the university campus, Non-university affiliated apartment/house **beyond 2 blocks** of the university campus, and the open ended option, “Other.” Since the university is an urban university, and most students are commuter students, it was important to be able to denote those who live on campus, and those who live off campus. Another reason for asking where participants live is that four of the locations included in this study are university owned or affiliated housing. These four housing locations rank 1st, 2nd, 4th, and 6th, in the number of crimes reported, for all locations on and off campus, for which the University Police Department is responsible, according to the 2011 University Police Crime statistical data. Is it that participants who live in any of these four housing options are more fearful in their homes than are those not living in these locations?

The survey concluded with six general questions that asked participants about their past experience of victimization and their fear of being victimized in the future. See Figure 3. Survey Instrument, can be found on page 91 in the appendix shows the logic sequence for the fear questions and the demographics can be found on Figure 4. Survey Demographic Questions can also be found in the appendix

CHAPTER V

RESULTS

Data Analysis

The data analysis for this research is comprised of descriptive statistics, independent sample *t* tests, reliability test for the fear scales of “I am afraid” and “I think I would be afraid,” regression models, and factor analysis. My unit of analysis is students enrolled at the University of Louisville, an urban university in the Midwest region of the United States. For the regression models, the variables used are composite measures that would indicate overall fear. The two variables used to construct this composite were “fear of walking alone at night on campus” and “fear of becoming a victim of violent crime on campus.” For the factor analysis, the variable “TOTFEAR” was used. This variable was a composite measure using a summative scale of the four fear variables that takes values from 4 to 16.

Findings

My first hypothesis is that certain demographics will impact a respondent’s level of fear. Demographics, such as a student’s gender, class status (freshman, sophomore, junior, senior, or post grad), race, course load (full time vs. part time), residency status (lives on campus vs. off campus), previous victimization experiences, and participation in social life connected to the university, are some of the independent variables that will be used in the analysis. Second, that the six areas that are the locations with the highest reported levels of crime for the year 2011 will provoke higher fear levels than do

locations reported in the 2001 Bledsoe and Sar's study. I will test this hypothesis by comparing the fear scores for those locations cited in the 2001 Bledsoe & Sar report, with those six location that have been designated as having the greatest number of crimes reported for the year 2011. My third hypothesis, based on the literature review is that characteristics of space will influence perceptions of fear. Using the concepts of prospect (openness), refuge (space where someone can hide), and escape, where the area offers opportunity for escape if needed, to determine if there are indeed distinct factors with regards to these locations. A factor analysis will be conducted.

A reliability test was conducted for the variable fear scale "I am afraid." Results of this test are shown in Table 3 below. This table is based on a combination of those answering "Somewhat Agree" and "Strongly Agree," for those who had been in the specific location, at night, regarding their level of agreement with statements concerning being afraid of being attacked by someone with a weapon, having their money or possessions taken from them, being beaten up, or being sexually assaulted. The Cronbach Alpha, Scale Means, and Scale Standard Deviations are included in the table. Each scale, for each location had a Cronbach Alpha that was at least a .916 or higher, indicating that the scale is to be considered reliable and scale statistics for the variables are shown on below.

Table 3. Fear of Crime in Specific Campus Locations

Afraid of...	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13
	N=118	N=150	N=133	N=63	N=153	N=134	N=177	N=94	N=99	N=174	N=2	N=48	N=109
...being attacked by someone with a weapon	45.8%	28.5%	27.4%	76.2%	22.7%	14.8%	15.6%	54.8%	38.4%	12.1%	50%	45.8%	21.8%
...having my money or possessions taken from me	51.7%	36.0%	37.0%	82.6%	28.6%	24.4%	22.4%	53.2%	50.5%	17.8%	50%	54.2%	26.6%
...being beaten up	33.9%	23.2%	24.7%	68.2%	21.6%	14.9%	13.4%	45.2%	35.3%	11.5%	50%	50%	21.8%
...being sexually assaulted	42.4%	26.5%	26.2%	58.7%	25.3%	16.3%	16.2%	44.2%	34.3%	13.2%	50%	43.8%	21.8%
Cronbach Alpha	.916	.929	.942	.925	.938	.936	.937	.940	.920	.951	.960	.960	.953
Scale Mean	9.13	7.83	7.82	11.27	7.60	6.97	6.73	9.63	9.20	6.56	9.00	9.42	7.50
Scale Std. Deviation	3.19	3.10	3.46	3.40	2.95	2.92	2.91	3.51	3.58	2.74	7.07	3.66	3.15

Each scale takes values from 4(lack of fear) to 16 (high level of fear). It includes only the responses of students who have been (often or occasionally) in these location

Table 3.1. Scale Statistics for “I am afraid” scale.
For those who have been in these locations

Scale Statistics P1

Mean	Variance	Std. Deviation	N of Items
9.1271	10.197	3.19333	4

Scale Statistics P2

Mean	Variance	Std. Deviation	N of Items
7.8333	9.657	3.10751	4

Scale Statistics P3

Mean	Variance	Std. Deviation	N of Items
7.8271	11.977	3.46084	4

Scale Statistics P4

Mean	Variance	Std. Deviation	N of Items
11.2698	11.555	3.39927	4

Scale Statistics P5

Mean	Variance	Std. Deviation	N of Items
7.6078	8.674	2.94519	4

Scale Statistics P6

Mean	Variance	Std. Deviation	N of Items
6.9701	8.510	2.91726	4

Scale Statistics P7

Mean	Variance	Std. Deviation	N of Items
6.7345	8.480	2.91208	4

Scale Statistics P8

Mean	Variance	Std. Deviation	N of Items
9.6277	12.344	3.51337	4

Scale Statistics P9

Mean	Variance	Std. Deviation	N of Items
9.2020	12.816	3.57993	4

Scale Statistics p10

Mean	Variance	Std. Deviation	N of Items
6.5632	7.496	2.73788	4

Scale Statistics P11

Mean	Variance	Std. Deviation	N of Items
9.0000	50.000	7.07107	4

Scale Statistics P12

Mean	Variance	Std. Deviation	N of Items
9.4167	13.397	3.66021	4

Scale Statistics P13

Mean	Variance	Std. Deviation	N of Items
7.5046	9.900	3.14650	4

For those whose responses were either “Never” or “I Don’t Remember,” being in these specific locations, a scale was constructed using the variables “I think I would be afraid” at this location, at night, of being attacked by someone with a weapon, having my money or possessions taken from me, of being beaten up, or being sexually assaulted.

The reliability test results for these variables are presented in Table 4 and Table 4.1

below shows the results of the scale statistics. Cronbach Alpha for these variables ranged

from .888 to .964. A Cronbach Alpha is a measure of how closely related are these items.

A reliability coefficient of .70 or higher is considered acceptable in most social science

research situations (<http://www.ats.ucla.edu/stat/spss/faq/alpha.html>).

Table 4. “Inferred” Fear of Crime in Specific Locations

I “think” I would be afraid of...	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11*	P12	P13
	N=112	N=80	N=96	N=167	N=77	N=96	N=52	N=136	N=132	N=57	N=227	N=183	N=121
...being attacked by someone with a weapon	49.1%	28.8%	20.8%	80.2%	26.0%	20.0%	23.1%	66.2%	31.3%	10.5%	49.1%	56.0%	32.2%
...having my money or possessions taken from me	58.4%	30%	31.6%*	85.6%	27.3%	27.1%	23.1%	75%	37.9%	21.1%	52.4%	61.2%	41.7%
...being beaten up	34.8%	23.8%	20%	75.4%	20%	17.7%	17.3%	59.7%	28.2%	7%	50.7%	49.7%	31.7%
...being sexually assaulted	46%	27.5%	22.9%	67.3%	26%	21.9%	19.3%	55.1%	27.3%	10.5%	46.3%	50%	30.6%
Cronbach Alpha	.888	.924	.928	.893	.934	.964	.952	.917	.944	.936	.963	.940	.952
Scale Mean	9.47	8.19	7.82	12.47	8.17	7.72	7.48	10.72	8.16	7.14	9.87	9.81	8.50
Scale Std. Deviation	3.0	2.83	2.74	3.26	2.71	2.77	2.93	3.41	3.17	2.49	3.91	3.30	3.17

Each scale takes values from 4(lack of fear) to 16(high level of fear). It includes only the responses of students who have been either (Never or I don’t know) in these locations.

Table 4.1. Scale Statistics for “I think” I would be afraid scale.
For those who have NOT been or don’t remember being in these locations

Scale Statistics P1

Mean	Variance	Std. Deviation	N of Items
9.4685	8.997	2.99945	4

Scale Statistics P2

Mean	Variance	Std. Deviation	N of Items
8.1875	8.028	2.83332	4

Scale Statistics P3

Mean	Variance	Std. Deviation	N of Items
7.8211	7.510	2.74047	4

Scale Statistics P4

Mean	Variance	Std. Deviation	N of Items
12.4788	10.617	3.25836	4

Scale Statistics P5

Mean	Variance	Std. Deviation	N of Items
8.1711	7.344	2.70992	4

Scale Statistics P6

Mean	Variance	Std. Deviation	N of Items
7.7188	7.657	2.76711	4

Scale Statistics P7

Mean	Variance	Std. Deviation	N of Items
7.4808	8.568	2.92716	4

Scale Statistics P8

Mean	Variance	Std. Deviation	N of Items
10.7164	11.633	3.41076	4

Scale Statistics P9

Mean	Variance	Std. Deviation	N of Items
8.1615	10.043	3.16914	4

Scale Statistics P10

Mean	Variance	Std. Deviation	N of Items
7.1404	6.194	2.48882	4

Scale Statistics P11

Mean	Variance	Std. Deviation	N of Items
9.8717	15.303	3.91196	4

Scale Statistics P12

Mean	Variance	Std. Deviation	N of Items
9.8087	10.881	3.29861	4

Scale Statistics P13

Mean	Variance	Std. Deviation	N of Items
8.5042	10.049	3.16997	4

For the variables “I am afraid,” location P4-3rd Street and Eastern Parkway walkway tunnel revealed higher fear scores than all other locations in all four categories ($\alpha = .925$). These results indicate that, at night, students are more afraid of being in this location than any other location asked about on this survey. For respondents who have been in this location $N=63$, 82.6% felt most afraid of having their money or possessions taken from them. Next they were most afraid of being attacked by someone with a weapon (76.2%), followed by 68.2% afraid of being beaten up, and 58.7% of the respondents indicated they were afraid of being sexually assaulted in this location. This location also had the highest fear scores for those students who indicated that they had either “Never” been in this location or answered “I Don’t Remember” being in this location but thought they would be afraid, at night, of being attacked by someone with a weapon, of have their money or possessions taken from them, being beaten up or sexually assaulted. Of the 167 students who indicated that they have “Never” been or answered “I Don’t Remember” being in this location, 85.6% were most afraid of having their money or possessions taken from them. Similar to the group of students who have been in this location, fear of being attacked by someone with a weapon was the second most fear provoking choice followed by fear of being beaten up, and fear of being sexually assaulted.

For locations, P12-Papa Johns Pizza parking lot, and P8-Papa John Cardinal Stadium parking lot, the scores for those respondents who had been there were mixed. P12-Papa John Pizza ranked second in both fear of having their money or possessions taken from them and fear of being beaten up. Fear of being attacked by someone with a weapon and fear of being sexually assaulted (Mean = 9.42) both ranked third.

Conversely, the P8-Papa John Cardinal Stadium parking lot ranked second for fear of being attacked by someone with a weapon and being sexually assaulted and ranked third for fear of having money or possessions taken and fear of being beaten up (Mean = 9.63). Students indicated that fear of being attacked by someone with a weapon (54.8%) was their primary fear for the location, P8-Papa John Cardinal Stadium. For those who answered “Never” or “I Don’t Remember” being in location P8-Papa John Cardinal Stadium parking lot, this site was ranked second for each of the four fear scale questions (Mean = 10.72). Fear of having their money or possessions taken from them (75%) was their greatest fear. The location P12-Papa John Pizza parking lot was third for all four scale questions (Mean = 9.81) and the fear of having their money or possessions taken was these respondents’ greatest fear (61.2%).

Location P1-Floyd Street parking garage ranked fourth in all four scale questions for both those who had been in this location and those who had “Never” been or answered “I Don’t Remember” being in this location (Mean = 9.13), (Mean = 9.47) have not been. For this location, fear of having their money or possessions taken from them was the biggest for 51.7% of respondents for those who have been there and 58.4% of respondents who indicated they have not been there.

For all locations, respondents who answered “Never” or “I Don’t Remember” being there, were more afraid of having their money or possessions taken from them, than they were of being attacked by someone with a weapon, being beaten up, or being sexually assaulted. For respondents who had been in these locations, having their money or possessions taken from them was their greatest fear for all locations except, one. For location P8-Papa John Cardinal Stadium, respondents were more afraid being attacked by

someone with a weapon than of having their money/possessions taken, being beaten up, or sexually assaulted. A ranking of these campus sites based on perceived fear can be found on Table 5. Although students who never visited a site tend in most circumstances (10 out of 12) to have an average higher level of fear of crime, for all selected locations there are no significant differences between the perceived fear of crime of those who actually visited these sites and those students who have not been there.

Table 5. Ranking of Selected Campus sites based on perceived fear of crime

N=235

Rank #	Location	Scale Mean: (Visited the Site)	Scale Mean: (Has not visited the site)	t
1	3rd & Eastern Parkway (P4)	11.27	12.47	.682
2	Papa John Cardinal Stadium Parking Lot (P8)	9.63	10.72	.597
3	Papa John Pizza Parking Lot (P12)	9.42	9.81	.555
4	Floyd Street Parking Garage (P1)	9.13	9.47	.745
5	The Province Apartments (P9)	9.2	8.16	.588
6	Behind JB Speed Museum (P2)	7.83	8.19	.567
7	Bettie Johnson Hall (P3)	7.82	7.82	.070
8	JB Speed Walkway (P5)	7.6	8.17	.491
9	University Towers Apartments (P13)	7.5	8.5	.300
10	Kurz Hall (P6)	6.97	7.72	.659
11	Ekstrom Library (P7)	6.73	7.48	.204
12	Student Activity Center (SAC) (P10)	6.56	7.14	.951

For the factor analysis, a new variable was created comprised of all fear scores for each respondent, for each location. These new variables, TOTFEAR (1-13), are summative scales that indicate “location fear.” The variable scores range from four (lack of fear) to 16 (high level of fear). A factor analysis using orthogonal rotation was used for all 13 locations and two factors have been extracted with Eigenvalues higher than

one. Orthogonal rotation was used to allow generalizability of the results because “the purpose of research is to enhance and promote knowledge in the area being investigated, therefore, being able to generalize one’s findings become of utmost importance” (Rennie, 1997, Abstract).

Based on factor loadings and visual examination, the analysis revealed component one referred to fear of crime related to buildings and the other referred to fear of crime of open spaces. The two new variables (buildings and open spaces) have been saved and the inner-group differences in mean scores for selected variables have been examined to determine if the differences in the means of various groups were statistically significant.

The independent *t*-test indicated that the mean level of fear for gender in both buildings and open spaces is statistically significant. That is to say, females are more fearful than males in both buildings and open spaces. There were no significant differences for whites and, full time and part time students, freshman and non-freshman, and those who had reported being victims of crime and non-victims. Students who live on campus had a statistical significance ($p = .051$) for buildings but not for open spaces. That is, students who live on campus are more fearful with regards to buildings and/or the area around the buildings than are students who live off campus. There were no significant differences for those living on or off campus for open spaces. Participant in social life were also significant $p = .02$, for buildings but were not significant for open spaces. That is, those who have participated in social life (attended a meeting or party in the past 12 months) are significantly more afraid in buildings and/or the area surrounding the buildings than are students who did not participate in social life (attend meeting or party in the past 12 months).

Table 6 reports the results of this analysis. Figure 5 on page 96 of the appendix lists the five buildings and their photographs. Figure 6 in the appendix lists the three open spaces and their photographs. Table 8 in the appendix shows the factor loadings for each of the two factors.

Table 6. *t* Test of Factor Groupings of Buildings and Opens Spaces at U of L Belknap Campus

		BUILDINGS								OPEN SPACES							
		Mean	Mean Diff	Std. Error Mean	95% Interval		<i>t</i>	df	Sig. 2 tailed	Mean	Mean Diff	Std. Error Mean	95% Interval		<i>t</i>	df	Sig. 2 tailed
					Lower	Upper							Lower	Upper			
Male	N=70	26.54	10.68	.93	-13.30	-8.05	8.03	192	.000	18.11	-7.66	.75	-9.55	5.77	7.99	228	.000
Female	N=160	37.22		.95						25.78		.54					
Non-white	N=48	34.13	.09	1.83	-3.74	3.92	.04	226	.965	22.29	-1.59	1.17	-3.99	.81	1.31	226	.192
White	N=180	34.04		.88						23.88		.55					
Non-Victim	N=207	23.36	-.99	.53	-4.76	3.04	-.52	222	.605	34.00	-.71	.83	-6.70	5.29	-.23	222	.817
Previous Victim	N=17	24.35		1.85						34.71		3.08					
Lives On Campus	N=109	35.61	3.20	1.20	-.02	6.42	1.96	213	.051	24.16	1.62	.65	-.39	3.62	1.59	213	.112
Lives Off Campus	N=106	32.41		1.10						22.54		.78					
Freshman	N=87	23.69	.40	.72	-1.63	2.42	.39	228	.701	33.48	-.78	1.25	-3.99	2.42	-.48	228	.63
Non-freshman	N=143	23.29		.67						34.27		1.01					
Full time	N=217	29.00	-5.27	3.00	-11.96	1.43	1.55	228	.122	23.66	3.81	.51	-.42	8.04	1.78	228	.077
Part time	N=13	34.27		.81						19.45		2.27					
Participant	N=61	31.15	3.84	1.23	.74	6.93	2.46	138	.015	22.31	1.54	.98	-.68	3.76	1.37	228	.174
^a Non-Participant	N=169	34.99		.96						23.85		.58					

In this study, multiple linear regression has been used to assess the impact of individual-level characteristics on the students' overall level of fear of victimization on campus. The dependent variable was a composite measured created through factor analysis. The indicators used to create the factor were: "I am afraid to walk alone at night on campus", and "I am afraid of becoming a victim of violent crime on campus." When factor analysis was conducted only one factor was extracted (Eigenvalue = 1.684; which explained 84% of the variance. The reliability coefficient Alpha for the scale was .809. The following variables have been used as predictors of the overall fear of crime: race, course load (full time/part time), class status (Freshmen vs. other), housing status, experience with victimization, and participation in social life. Dummy variables were created for race (minority coded 1), class status (freshman coded 1), course load (fulltime student coded 1), residence (non-university apartment/house more than 2 blocks from the university coded 1), victim of crime (victims of property and/or violent crime were coded 1), and participation in campus social life (if respondent participated at least at one party and/or student meeting coded 1).

A full model for overall sample N=235, included all predictor variables except for gender. The only variable that was mildly significant at the 1- tail test, was the dummy variable freshman, $p = .09$. Based on the results of the preliminary analyses, less than 1% of the variation in the overall fear of crime was explained by this model ($\text{Adj. } R^2 = .008$).

When gender was introduced in the equation, a significant increase in the variance was explained by the model ($\text{Adj. } R^2 = .299$) could be observed (see Table 7). For the overall sample, as anticipated, the level of fear was significantly higher for female students when compared to their male counterparts. Although gender was the only

significant variable in the model (at $p < .05$, 2-tail test), it can be noticed that students who tended to express higher levels of fear were those who experienced victimization on campus, were at the beginning of their studies, and participated at social events on campus during the year that preceded the survey.

Table 7. OLS Regression Estimates for fear of crime on U of L Belknap Campus

Variable	Model 1 N=230				Model 2 (Males) N=70				Model 3 (Females) N=160			
	b	Std. Error	Beta	p	b	Std. Error	Beta	p	b	Std. Error	Beta	p
Constant	-.595				-.379				.718			
Victimization experience	.186	.218	.049	.395	.371	.276	.163	.185	.066	.307	.018	.829
Gender (female)	1.201	.125	.553	.000								
Race (minority)	.011	.136	.005	.936	-.346	.194	.208	.079	.185	.177	.085	.297
Status (freshman)	.114	.119	.056	.339	.331	.189	.203	.084	.048	.147	.027	.743
Full-time student	-.372	.254	.086	.144	-.036	.293	.016	.902	-.712	.406	.142	.082
Residency (off campus)	-.081	.117	.040	.491	.416	.175	.286	.020	.045	.149	.025	.765
Participation in campus social life	.113	.134	.050	.400	.391	.193	.253	.048	.335	.171	.163	.052
R Square	.320				.199				.049			
Adj. R Square	.299				.121				.011			

For the model 1, in Table 7 gender was added to the list of independent variables. Gender was significant at a 2-tail test $p = .000$. Based on the model summary, approximately 30% of the variation in fear is explained by the model with an adjusted R^2 of .299 and gender explains about 29% of the variation in the overall fear of victimization. When controlling for race, experience with victimization, class status, course load, residency, and participation in social life, women have an average level of fear 1.2 standard deviations higher than the average value of fear register for male students. Collinearity has been calculated for all variables in the model VIF varied from 1.025 to 1.145.

Additional analyses examined the effect of individual characteristics on fear of crime for each gender group. Results show that the selected variables explain about 12% (Adj. $R^2 = .121$) in the variation of overall fear for male respondents and only 1% (Adj. $R^2 = .011$) of the variation in fear for the female students (see Model 2 and Model 3), Table 7). For the male subsample, students who participated in campus life and those who live in areas located more than two blocks from campus have a significantly lower level of fear than male students who did not attend any meeting or party in the previous year and those who live on campus or close by, respectively. Although differences in scores are not significant, male minority students and male full-time students tend to have a lower level of fear than white males and part-time male students, respectively. For both gender groups, experience with victimization is positively associated with fear of crime. However, victims of crime do not differ significantly in their overall level of fear when compared to students who have not been victims of campus crime. While male students who participated in campus activities tend to be less fearful than the other male students,

female students who participated in parties or meetings during the past year tend to have a higher level of fear than female students no involved in campus life. Female minority students and freshman female students also tend to be more afraid of victimization (these variables are significant only at 1-tail test, $p < .05$).

CHAPTER VI

DISCUSSION AND CONCLUSIONS

When considering fear of crime, one must recognize that researchers and respondents may have very different understandings of the actual meaning and responses to the fear of crime, as noted by Pain (2000). Referencing a study by Smith (1987b, p. 2), Pain noted that the fear of crime a respondent may experience can be “intermittent or constant,” and that each different type of crime (e.g. burglary, car theft, sexual assault) may evoke as many different reactions as the variety of the crimes themselves. Further, Pain, referencing other studies, (Valentine 1989; Stanko 1990a; Pain 1997a), posits that the fear of crime each person feels adapts to the social, spatial, and temporal situation, arguing that “we move in and out of shades of fear” (p. 368), over the course of our lives.

The Security On Campus, Inc., website states that 93% of the crimes against students happen off campus (<http://www.securityoncampus.org/>) and that 72% of those crimes occur at night. Yet, 41.9% of the respondents in this study indicated that they are afraid of becoming a victim of violent crime on campus and only 8% of the sample had experienced some type of victimization. It is possible that this statistic would be different if the sample had included a larger sample population. From the analyses that were conducted for this study the general sense of fear for students on campus seems to be primarily about having their money or possessions taken from them (theft/larceny).

The greatest fear for those who have not visited these locations and for those who have visited these locations, was fear of having their money or possessions taken from them. This was the highest of all fears, for all but one location, P8-Papa Johns Cardinal Stadium, where fear of being attacked by someone with a weapon was slightly greater 54.8% vs. 53.2%.

On a typical college campus, students are continually moving about. They are on their way to or from classroom buildings, dining facilities, resident facilities, parking lots, sport venues, or other campus venues, with many toting backpacks filled with books and computers, purses, sports equipment, Ipads, and other types of gear. Often, they may ask someone to “watch their stuff” while they stop to visit the lavatory at the library, or to grab a quick drink at one of the dining halls or student center. They may intentionally, or unintentionally, leave the doors to their car or their room unlocked, and they typically follow the same routine each day, with this predictability possibly making them more vulnerable. Any of these seemingly minor factors can put them at risk of becoming victims.

Routine Activity Theory would suggest that full time students spending a great deal of their time on campus, whether they are on campus residences or not are at greater risk of being victimized, and therefore should have a greater level of fear of being victimized. This study found no significant difference in fear when residency was taken into account, and as a general tendency, students who live off campus are less afraid, and male students living off campus (beyond 2 blocks of the university) are significantly less fearful. Full time students were less fearful than part time students which would support the theory albeit only partially. With so much activity and diversity on a college campus,

it could be easy for a would-be-criminal to take advantage of students who spend a lot of time on campus and therefore, offer more opportunities to be victimized. Perhaps the reason that males and full time students feel less fearful is that spending a lot of time in a specific area engenders feelings of confidence and a sense of security. It is particularly telling that on the campus security website (<http://louisville.edu/police/safety>) the only safety information listed is suggestions of how to avoid being a victim of Robbery (which is taking property from a person (theft) by use of threat or force). One could surmise that, for this university, the only thing students have to fear is losing their property by being a victim of Robbery (which is a violent crime, not a property crime). Perhaps campus security should expand the safety information on their website to include suggestions and recommendations on how to avoid being a victim of theft (e.g. never leave your belongs under the “watchful eye” of others or before you leave your car/room double check to make sure the lock engaged).

Among the goals of this study was to determine if certain demographics will impact a respondent’s level of fear. Female students may feel more vulnerable, even though research has shown, as previously stated, that victims of crime are overwhelmingly male. From this study we can see that females are more afraid than are males, which is consistent with past research. However, involvement in social activities reduced female’s fear level and increased the fear levels for males. Going to parties and getting involved in social organizations are all part of the “college experience.” For some students, being in new social situations where they are mingling with people they do not know, and in unfamiliar spaces, can induce feelings of fear, and many of these activities, such as parties, occur at night. As previously cited in this text, males tend to be more

fearful in unfamiliar locations, or with people they do not know, as it takes them out of their comfort zone and places them at a disadvantage. Non-whites have lower fear than do whites in this study. However, this finding was only mildly significant $p < .08$, whites $N=180$ and non-whites $N=50$, had the sample been larger, the effect could have been stronger. Overall, few of the demographics had a significant impact on fear of crime. Gender (female), living on campus, and social life, were found to be significant, and for the other demographics, race, freshman, and full time student, the impact was barely significant. A limitation of this study was that the sample was relatively small and therefore, was not representative; therefore, results should be cautiously interpreted.

Another goal of this study was to look at specific spaces on campus to determine if certain spaces on campus are more fear provoking than other spaces, and, if so, what are the characteristics that they have in common? Using Bledsoe & Sar's (2001) study as a starting point, the first two locations for each of the three categories (in and around buildings, parking lots and garages, and walkways and pathways) were selected. However, there was no mention in this study as to how any of these location ranked in order of evoking feelings of fear and therefore, the third location in parking garages may have been more fear provoking than the first location in buildings. It is suggested that any further research using this study (Bledsoe and Sar, 2001) should include a true ranking order of fear provoking places on the U of L campus in 2001. For the purposes of this study, using the first two locations per category was adequate.

The next six locations were selected by ranking the locations for which campus security has jurisdiction, thereby being considered "on campus." These locations had the highest number of reported incidents for which a police presence was required. This

study sought to determine if the 2001 locations still evoke the highest levels of fear, or have the 2011 locations, where the highest numbers of crimes are committed, become the most fear provoking places? To be sure respondents were clear about which space being asked about; photos were provided to give them clarification. For the 2001 locations, 4 of the 6 locations (P4, P12, P1, and P2) used in this study were among the top 5 most fear provoking locations for those who had been in the specific location. For those who had never been in the location, 3 of the 6 locations (P4, P12, and P1) were among the top 5 most fear provoking locations.

These photos were then uploaded to an online website in conjunction with the survey. Photo size requirements for this online website limited the size of the photos to 150 kb. This resulted in having photos of differing size due to the level of pixilation, the more densely pixilated the photo, the smaller it became. Therefore, photo sizes on the survey were inconsistent and may have caused some bias.

Initially students were directed to a series of questions based on their having been in a specific location, or not having been there. This was done to see if there was a difference between being in a space and assessing fear cues, and looking at a photo to assess fear cues. As previously stated, those results can be found in the Tables 3 and 4 pages 47 and 51, respectively. However, there is precedence for not drawing any distinction between, perceptions of fear from having been at these locations, and inferring perceptions of fear (Austin and Sander, 2007; Sutton and Farrall, 2005). In the study by Austin & Sander (2007), respondents were asked to assess their fear based on photos of graffiti, without having actually been in the sites where the graffiti is located. And in Sutton and Farrall's (2005) study, the authors suggest that one way to assess fear of crime

is to ask the participants to “imagine being a victim of crime” (p. 224). The results from this study support the approach, suggested by both studies, of not making a distinction between those who have actual experience or knowledge, and those who are inferring. Both groups in this study had similar findings, although for 10 of the 13 locations, the average was higher for those who have not been in these locations; therefore, we could then turn to which of these locations are respondents most afraid.

Without question, the P4-3rd Street and Eastern Parkway tunnel is the most fear provoking space of the spaces asked about on this survey. In looking at the photograph, respondents can see if the tunnel is occupied or empty, but cannot see what is to the left at the end of the cement wall. This area could be considered what Goffman (1971) called a lurk line, where the line of sight is blocked and a potential offender may be hiding. The photograph also reveals the fact that there are wrought iron gates in each archway, which essentially serves to encase the entire tunnel, leaving no chance of escape if potential offenders block both ends of the walkway. Even though this picture was taken on a bright sunny day it still appears somewhat dark. The photo reveals a light in the ceiling of the walkway. However, light bulbs do burn out, and can even be purposely knocked out, making this naturally dark tunnel even darker. Utilizing the concepts of prospect, refuge, and escape, it is easy to see that a person could stand at the opening and begin to assess the fear cues. How open is the space (not at all), can I escape if approached (only if you are approached from one end of the tunnel), if I get through the tunnel am I free (unless someone is waiting around the corner)? It is easy to see why this specific site provokes the highest level of fear.

P8-Papa John Cardinal Stadium and P12-Papa John Pizza parking lot were the next two sites that provoked high levels of fear. Both spaces are located on the outer perimeters of campus, with Papa John Cardinal Stadium (PJCS) being located much farther from campus. One consideration is that the PJCS photo was taken at a time when it was almost empty. Perhaps a photo of the parking lot when full may have resulted in a different fear score. The pizza parking lot was full. Perhaps showing it empty would also result in different fear scores. Either way, fear scores for both lots suggest that students feel at risk when they are in the parking lots, arriving or leaving campus. Again, using prospect, refuge, and escape, the openness of PJCS allows for ease of prospect (can see all around you). However, this also leaves the student exposed. The athletic office that is located in the parking lot is open during the day (ticket sales) and buses that circulate around the campus are in and out of the lot dropping off and picking up students. At night, however, these offices are closed, and the buses circle less frequently, as there are fewer night classes than day classes. The area around PJCS is primarily industrial, so these businesses are closed at night, and many of these businesses are fenced-in, leaving little recourse for seeking refuge or escape from potential offenders. Again, PJCS parking lot is the only place that freshmen can park using a permit.

The Papa John Pizza parking lot is a small lot that allows access to the campus by walking along side the railroad tracks, which is fenced-in on the left up to Warnock Street, and to the right is the rear of the Studio Arts building. This creates an alley, which places any pedestrian, particularly at night, in a situation much like the tunnel on 3rd and Eastern Parkway. There are multiple alcoves in the back of the Studio Arts building

offering little prospect (open view), and again, chances of refuge or escape are totally dependent on one end or the other of this “alley” being open.

The fourth location that garnered higher levels of fear was the Floyd Street Parking Garage. Similar to the tunnel on 3rd Street, during the day, three of the four levels are fairly dark. Only the top level is completely open to the daylight. Parking garages only offer prospect (open view) if they are empty and as students come and go to campus, the ability to see what or who is in the area is restricted. Walking to or from the car to one of the three exits can be very intimidating for commuters. The main access to the campus is located on the third level so if a commuter must park on any other level, they must use either the stairwell or the elevator to reach the third level. Either of these options put commuters at risk of being caught either in the elevator, with little or no chance of escape, or in stairwells with limited options. What is most interesting is that students felt that this location was the fourth most fear provoking despite the fact that the Campus Security offices are located on the ground level at the center of this parking garage, and is open 24 hours.

The final goal of this study was to determine what similarities, if any, these locations have. Using factor analysis and respondents TOTALFEAR scores, two different types of spaces engendered the highest levels of fear. The first was buildings, and the second was open spaces. Utilizing the concepts of prospect, refuge, and escape, it could be argued that buildings offer little prospect. Whether these buildings are dorms, classroom buildings, or the library, they all consisted of various levels, which are filled with rooms, hallways, alcoves, and other hidden areas that reduce a clear line of sight for those in the space, or who are imagining what it would be like to be in the space. Two of

the locations which loaded on this component were considered by this study as walkways/pathways between buildings, and, therefore, the buildings were prominently displayed in the photos. Perhaps the fact that the buildings themselves block a person's line of sight, creating hiding places for potential offenders, caused them to be included in the component.

The three locations that loaded on factor two at .700 or higher would be considered open spaces. And, as previously discussed, with regards to open spaces, females are significantly more fearful than are males, and full time students are more fearful than part time students, but only mildly $p = .08$. The open spaces included P8-Papa Johns Cardinal Stadium, P12-Papa Johns Pizza parking lot, whose characteristics relative to this discussion were talked about above, and P11-a Reflective Place (the author's backyard). Consideration was given to eliminate the backyard photo from analysis, but I felt that that its inclusion was sound, as it was representative of many of the points made in this research. Not one respondent had ever been in this location; therefore, everyone would be making an assessment of the location based on their own imagination of what could happen here. The area is depicted as fairly serene, a deck area lightly dusted with snow, a trellis, a tree, grass and ivy, and a fence. Tables 3 and 4 both reflect that approximately 50% of the students would be afraid of all four crimes happening to them at this location. They were all unfamiliar with the location. However, they could see that it was fenced-in and that there were also 2 other fences in the photo, so there may be little chance of escape. Beyond the first fence was more open area with a second fence, which, again, might leave them exposed to potential offenders. The second fence, a wooded privacy fence, blocked the line of sight, thus creating a lurk line

(Goffman, 1971), where a potential would-be-criminal might be hiding. All three of these locations reflect how even open spaces can create feelings of fear.

This study included photographs in which buildings (and/or the area surrounding the buildings) featured prominently in 8 of the 13 locations. Five of these photographs that featured buildings were extracted in the factor analysis and additional analysis was conducted. The study found that females are significantly more fearful than are males ($p = .000$), those who live on campus are more fearful than those students living off campus ($p = .051$), and non-participants in social life (have not attended a meeting or party in the last 12 months) are more fearful than those students who had participated in social life. One could only speculate if the respondents' perception of fear was based on the area around the building, or if fear was being inside the building. Future studies could include more probing questions regarding what element makes them afraid, the exterior of the, building, or its interior. And what, specifically, in these areas causes the respondent to be afraid.

One finding, that students live on campus who were significantly more fearful than students who live off campus for buildings, but not for open spaces, is particularly interesting. Most of the university sponsored housing is not situated on the main campus quad. The majority of the housing facilities are interspersed over several blocks west of the main campus. Strip centers which house retail stores, restaurants, and bookstores, along with university parking lots, are scattered among the dorms and housing facilities over a few blocks north and west of the main campus. Perhaps students who live on campus are more fearful of buildings because they have to navigate among more of them. Each cluster of buildings provides hiding spaces for potential assailants, whereas open

spaces offer prospect and opportunity for escape. The finding that those who have not participated in social life are more fearful of buildings, than those students who have participated in social life may also be due to the idea that the former may have to navigate through a myriad of buildings unfamiliar to them, and, therefore, their fear levels increase.

Students who indicated that they participated in social life on campus had lower fear levels than did students who have not participated in social life on campus. The assumption could be made that students who spend more time on campus become more familiar with the campus environment, and, therefore, less fearful than those students who indicated that they have not participated in social life. This data indicates that students should be encouraged to become more active in social life to reduce their fear levels.

This study has shown that a student's perception of fear is based on a variety of factors. As stated in the opening paragraph of this discussion, people move in and out of fear depending on the situation. The feelings of fear that a student, who spends time on campus experiences, change with each situation. Being on campus often or just occasionally, during the day or at night, around spaces that are familiar or not, will impact how safe they imagine they are. Since this study only considered students fear at specific locations at night, future studies should consider including questions regarding fear of crime in daylight hours. An additional suggestion for future research is to ask participants if there were any locations, not depicted, which they found fear provoking. Future research could also ask participants if the fear responses to questions about buildings is about the area surrounding the building, or about the interior of the building.

It may be possible that respondents could identify locations which campus security and the university administrators have not considered problematic.

Another limitation of this study was that the sample was relatively small and therefore, was not representative; therefore, results should be cautiously interpreted.

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APPENDIX

Figure 1. Survey Photo Array

Photo # 1: Floyd Street Parking Garage



Photo # 2: Behind JB Speed Museum



Photo # 3: Bettie Johnson Hall



Photo # 4: 3rd Street & Eastern Parkway

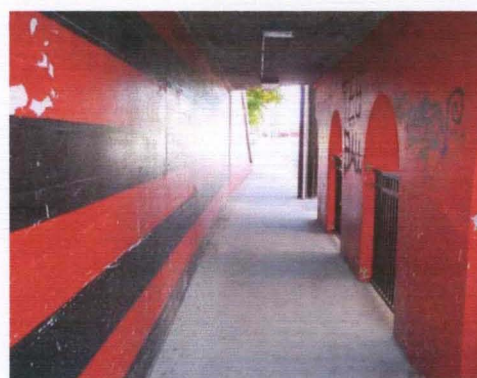


Photo # 5: JB Speed Walkway



Photo # 6: Kurz Hall



Photo # 7: Ekstrom Library



Photo # 8: Papa John Cardinal Stadium Lot



Photo # 9: The Province Apartments

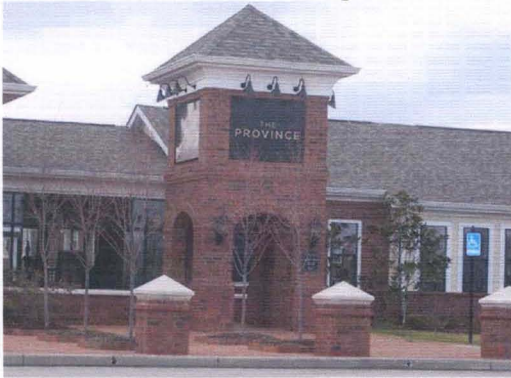


Photo # 10: Student Activity Center (SAC)



Photo # 11: Reflective Place (backyard)



Photo # 12: Papa John Pizza Parking Lot



Photo # 13: University Towers Apartments



Figure 2. Map Legend: University of Louisville



Figure 3. Survey Instrument Logic Sequence

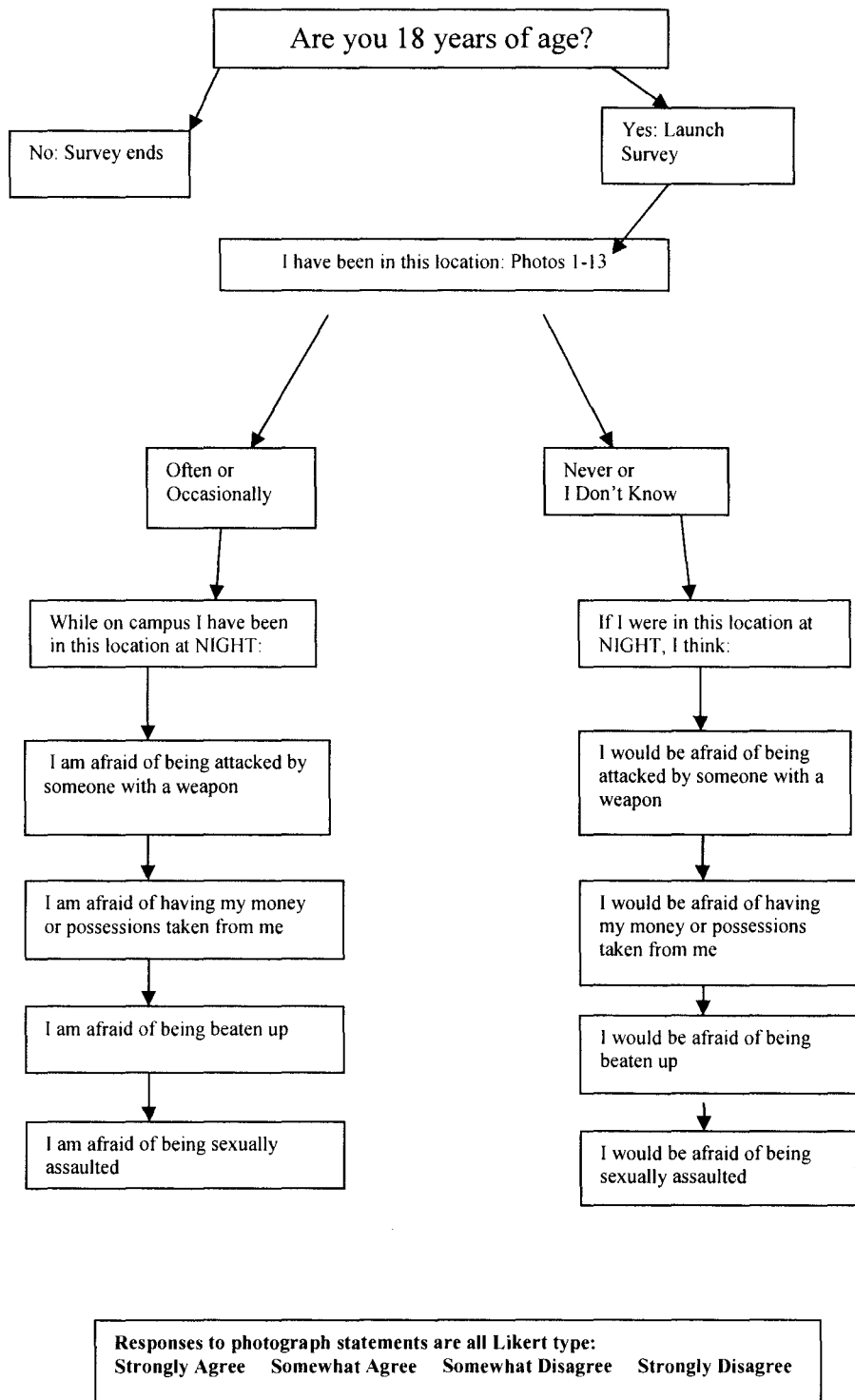


Figure 4. Survey Demographic Questions

What is your age?					
What is your gender?	Male	Female			
What is your race?	White	Black	Hispanic	Other	
What is your class status?	Freshman	Sophomore	Junior	Senior	Post Grad
What is your current course load?	Full time (12+ hrs under grad, 9+ hours grad-student)	Part time (less than 12 hours under grad, less than 9 hours grad)			
Are you an exchange or international student?	Yes	No			
Housing Status: I live in	Bettie Johnson Hall Billy Minardi Hall Cardinal Towne Center Hall Community Park Kurz Hall	Louisville Hall Miller Hall Phoenix Place Apartments The Bellamy The Province The Quad	Threlkeld Hall Unitas Tower University Park Apartments University Towers Apartments Wellness House West Hall		

	Non-university affiliated apartment/house within 2 blocks of campus	Non-university affiliated apartment/house beyond 2 blocks of campus	Other	
Have you ever missed an activity on campus (class, social or sporting event, etc.) due to being afraid of becoming a victim of crime?		No	Don't remember/Prefer not to answer	
How often did you attend a party on U of L campus last semester?	None	1-2 times	3-4 times	5 times or more
How often did you participate in a campus organization meeting or gathering (i.e. student organization, fraternities/sororities, etc) on the University of Louisville campus last semester?	None	1-2 times	3-4 times	5 times or more
While on campus within the last 12 months I have been a victim of property crime (burglary, larceny, theft, arson).	Yes	No		
While on campus within the last 12 months I have been a victim of violent crime (rape, date rape, attempted rape, robbery, assault, sexual assault).	Yes	No		

Are you more afraid of becoming a victim of On Campus
crime on campus or off campus?

Off Campus

I am afraid to walk alone at night on campus Strongly Agree

Somewhat Agree

Somewhat Disagree

Strongly Disagree

I am afraid of being burglarized in my home Strongly Agree

Somewhat Agree

Somewhat Disagree

Strongly Disagree

I am afraid of becoming a victim of violent Strongly Agree
crime on campus

Somewhat Agree

Somewhat Disagree

Strongly Disagree

Table 8. Factor Analysis Rotated Matrix

Rotated Component Matrix^a		
	Component	
	1	2
TOTFEAR2	.772	.377
TOTFEAR3	.809	.142
TOTFEAR5	.713	.468
TOTFEAR6	.858	.149
TOTFEAR7	.766	.318
TOTFEAR8	.235	.775
TOTFEAR11	.147	.801
TOTFEAR12	.355	.781

Extraction Method: Principal

Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

a. Rotation converged in 3 iterations.

Figure 5. Factor Analysis results: Component 1: Buildings

Photo # 6: Kurz Hall-(.858)



Photo # 3: Bettie Johnson Hall-(.809)



Photo # 2: Behind JB Speed Museum Photo # 7: Ekstrom Library (.766)
(.777)



Photo # 5: JB Speed Walkway (.713)



Figure 6. Factor Analysis results: Component 2: Open Spaces

Photo # 11: Reflective Place (backyard) (.801)



Photo # 12: Papa John Pizza Parking Lot (.781)

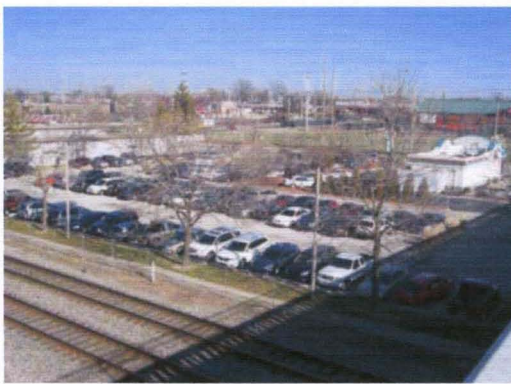


Photo # 8: Papa John Cardinal Stadium Lot (.775)



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